

Do foreign experienced managers influence employee compensation? Evidence from labor investment in China

Zixiong Sun, Hamish D. Anderson and Jing Chi
*School of Accountancy, Economics and Finance, Massey University,
Palmerston North, New Zealand*

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Abstract

Purpose – This study aims to investigate whether and how foreign experienced managers influence employee compensation in Chinese firms. While prior research has examined the impact of such managers on corporate governance, innovation and performance, little is known about their effect on labor investment, particularly “rank-and-file” employee compensation. The authors argue that foreign experienced managers are more likely to pursue complex value-added strategies requiring skilled labor, thus increasing compensation levels.

Design/methodology/approach – Using a sample of Chinese A-share listed firms, the authors identify foreign experienced managers as CEOs or chairpersons with prior work or study experience outside mainland China. The analysis uses panel regressions, as well as instrumental variable estimation, difference-in-difference (DID) tests and propensity score matching (PSM), to address endogeneity. The authors further examine mechanisms and heterogeneity analysis.

Findings – Firms with foreign experienced managers pay significantly higher employee compensation. This relationship is more pronounced where firms have excess cash or lower operating leverage. Mechanism tests support the efficiency wage theory where managers increase the proportion of skilled employees. In private firms, foreign experienced managers appear to increase compensation to improve total factor productivity and firm value. In contrast, foreign experienced managers in state-owned enterprises appear more motivated by political or social goals through enhanced employee treatment. In addition, the authors also find that foreign experienced managers are associated with higher labor cost stickiness, especially in private firms.

Originality/value – To the best of the authors’ knowledge, this is the first study to link managerial foreign experience with employee compensation. The results are particularly relevant for firms and policymakers aiming to balance employee welfare, productivity and strategic human capital investment in the context of global managerial mobility.

Keywords Managerial foreign experience, Labor investment

Paper type Research paper

1. Introduction

Foreign experience is a valuable human capital that helps managers to think globally and act locally, which is a difficult quality for others to imitate (Carpenter *et al.*, 2000;

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JEL classification – D22, E24, G30



Coff, 1997). It has been documented that managerial foreign experience positively influences a wide range of firm behaviors, including corporate governance, risk-taking, innovation and firm performance (e.g. Giannetti *et al.*, 2015; Yuan and Wen, 2018; Sun *et al.*, 2023). However, there is little attention on their influence on labor markets, which is surprising given that labor is a critical driver of both economic growth (Aghion *et al.*, 1998) and firm value (Merz and Yashiv, 2007). We help fill this gap by examining the influence of managerial foreign experience [1] on labor investment.

Foreign experienced managers in China are treated as “super stars” who are handsomely rewarded to transfer their superior knowledge and skills to Chinese firms (Yuan and Wen, 2018). However, the “super star” status attracts greater scrutiny and monitoring (i.e. the eyeball effect) from board directors, employees, investors, government, as well as traditional and social media outlets in China. Based on Yuan and Wen’s (2018) argument, the eyeball effect focuses foreign experienced managers on firm performance. Therefore, foreign experienced managers may adopt a cost-saving strategy to enhance short-term performance (Sheaffer *et al.*, 2009), as paying high employee compensation may reduce firms’ profitability and weaken firms’ internal capital availability (Klasa *et al.*, 2009; Matsa, 2010; Kong *et al.*, 2020). Alternatively, foreign experienced managers could drive performance by implementing a product or service value-added strategy through hiring and retaining high-skilled employees to enhance firm growth and innovation (Glaeser and Berry, 2006; Yuan and Wen, 2018). Although such managers could improve performance with either strategy, we argue that hiring costly “super star” foreign experienced managers is more likely to be made to drive complex value-added strategies within firms, which require building productive teams and teamwork (Hall *et al.*, 2005), rather than simply to cut costs. As such, we expect foreign experienced managers to be associated with higher employee compensation.

We examine the Chinese market for several reasons. First, traditionally, labor protection and average wages are comparatively lower in China than those of more developed markets. Although the labor contract reform to strengthen labor protection was enacted by the Chinese government in 2008 (Kong *et al.*, 2020), harmful employee welfare practices remain. For example, “996” was a common Chinese working norm where employees must work from 9 a.m. to 9 p.m., six days a week. This practice was only banned by the Chinese Government in 2021. However, managers with foreign experience may bring and implement positive employee treatment practices from high employee protection countries, and this spillover effect could therefore impact labor protection practices in China (Dai *et al.*, 2018). Second, endogenous growth theory suggests that human capital contributes significantly to economic growth (Aghion *et al.*, 1998). However, a lack of high-skilled employees constrains productivity and innovation within firms (Dollar, 2019), and this constraint is particularly problematic in Chinese firms. For example, in a survey of enterprises, the lack of skilled employees is the second biggest problem constraining Chinese firms’ innovative activity (Peking University Open Research Data [2]). Therefore, studies on employee compensation may help Chinese firms produce strategic plans to attract and retain skilled workers. Third, while data to study firm-level “rank and file” employees are difficult to obtain, the Chinese Accounting Standard for Business Enterprises-Basic Standard has required firms to report employees’ compensation details (e.g. salaries and allowances) since 2007. Moreover, the China Securities Regulatory Commission (CSRC) requires firms to disclose the descriptive statistics of their employee structures, including employee count, education and position.

Using the average wage expense per employee after excluding top executives’ compensation and the industry-adjusted average wage expense, we find evidence that

managerial foreign experience increases employee compensation. This result is confirmed after endogeneity checks, including instrumental variable (IV) analysis, difference-in-difference (DID) test, multiple fixed-effects tests and robustness checks.

We argue that the efficiency wage theory (e.g. firms having more high-skilled employees) is the potential mechanism through which managers with foreign experience increase employee compensation. Consistent with the efficiency wage channel, we find that firms with foreign experienced managers are associated with a high percentage of skilled employees. Moreover, foreign long-term or working experience has a significant impact on employee compensation. Further, managers with experience in high labor protection countries have a stronger impact on employee compensation compared to those with experience in high investor protection countries.

Next, we provide evidence on how firm characteristics influence the relationship between managerial foreign experience and employee compensation. We find it is more pronounced in firms with excess cash holdings and lower operating leverage. These results are consistent with Ghaly *et al.* (2017) who argue that firms require flexible and healthy financial conditions to attract and retain high-skilled employees. We also find that the positive relationship between managerial foreign experience and employee compensation exists in both state-owned enterprises (SOEs) and private firms, although the reasons why the relationship exists in SOEs and private firms may differ because of the differing goals managers are tasked with. For example, in addition to wealth maximization, foreign experienced managers in SOEs are tasked with political and social objectives (e.g. employees' well-being and safety) set by the government, and fulfillment of these objectives may help their future political promotion opportunities (Jiang and Kim, 2020). In contrast, private firms focus on productivity and shareholder wealth maximization. We find evidence supporting this conjecture. For example, in SOEs, managers with foreign experience improve employee treatment, but we do not find similar evidence in private firms. However, we find evidence that private firms with foreign experienced managers improve labor investment efficiency and total factor productivity and consequently enhance firm value through increasing employee compensation.

Finally, this relationship also results in greater labor adjustment costs leading to labor cost stickiness, especially in private firms, indicating a potential structural cost for firms appointing foreign experienced managers.

Our study makes several important contributions. To the best of the authors' knowledge, this is the first paper to document the relationship between managerial foreign experience and employee compensation. Our study builds on the work of Kong *et al.* (2020) and others who highlight the importance of endogenous growth theory and efficiency wage theory that human capital is important to economic growth (Zingales, 2000), and attracting and retaining high-skilled employees can facilitate firm performance significantly (Kong *et al.*, 2020). Previous studies show foreign experienced executives transmit their superior knowledge and skills to their Chinese firms (e.g. Giannetti *et al.*, 2015; Yuan and Wen, 2018; Dai *et al.*, 2018), and how managerial foreign experience benefits their own compensation (Yuan and Wen, 2018; Conyon *et al.*, 2019). In contrast, our study illustrates their impact on "rank-and-file" employees' compensation and the teams they build, which also drives firm performance. We show foreign experienced managers also transfer and implement favorable labor conditions (e.g. human capital building) to firms they manage.

Moreover, we extend the literature on managerial foreign experience. Previous literature indicates positive effects of foreign experienced executives on corporate investment decision-making, including innovation (Yuan and Wen, 2018), investment efficiency (Dai *et al.*, 2018), and corporate social responsibility (Zhang *et al.*, 2018). We add to this by examining labor investment, which is another important corporate investment decision.

Unlike capital investment which is financed through debt or equity, labor investment is primarily funded from firms' operating cash flows (Taylor *et al.*, 2019). Further, in addition to increasing employee compensation to attract and retain high-skilled employees for enhancing firm value, we also highlight a potential cost of appointing foreign experienced managers, as they are associated with increased labor cost stickiness.

Finally, we contribute to the labor investment literature. Previous literature mainly focuses on the influence of macro factors on employee compensation, such as labor policy reform, government connections and the bargaining power from unionization (Cui *et al.*, 2018; Li *et al.*, 2020; Kong *et al.*, 2020; Wei *et al.*, 2020; Klasa *et al.*, 2009). We argue that micro factors, such as managerial foreign experience, may also influence employee compensation.

The remainder of the paper is organized as follows. Section 2 provides relevant literature and hypothesis development. Section 3 discusses data and methodology. Section 4 reports empirical results. Section 5 investigates the drivers and impacts of high employee compensation in SOEs and private firms. Section 6 concludes the paper.

2. Literature review and hypothesis development

2.1 Literature review

Our study incorporates two streams of literature, with the first being employee compensation. In comparison with developed countries, China's employee compensation was relatively low before 2003, which was mismatched with the high growth in China's economy. Since 2003, employee compensation has increased substantially, with more than a 12% average growth rate from 2003 to 2015, and this is particularly evident in urban areas because of the shortage of migrant workers (Li *et al.*, 2020). The Chinese government formally enacted the Labor Contract Law in 2008, which strengthens employees' legal rights and increases employees' compensation and well-being, including social insurance, minimum wage and maximum working hours (Cui *et al.*, 2018). Moreover, human-capital-intensive firms may face high labor costs because of "talent wars," which induce firms to pay high wages to their employees to attract and retain high-skilled workers (Cao and Rees, 2020). Increased employee compensation can increase firms' precautionary cash holdings, as well as improve firms' productivity and innovation (Ni and Zhu, 2018; Cui *et al.*, 2018; Kong *et al.*, 2020; Li *et al.*, 2020).

The second stream of literature refers to managerial foreign experience. The upper echelon theory argues that an individual's characteristics can influence corporate performance significantly (Hambrick and Mason, 1984). Previous studies define foreign experienced executives as high-skilled talents whose superior knowledge and skills enable them to improve corporate performance, investment efficiency, innovation and corporate social responsibility (Giannetti, *et al.*, 2015; Dai *et al.*, 2018; Yuan and Wen, 2018; Zhang *et al.*, 2018). Moreover, prior studies find foreign experienced executives reduce stock price crash risk and corporate tax avoidance (Cao *et al.*, 2019; Wen *et al.*, 2020).

2.2 Hypothesis development

As foreign experienced managers are treated as "super stars" who receive higher compensation, they are burdened with greater expectations of improving corporate performance and behaviors (Yuan and Wen, 2018). How they seek to deliver these greater expectations could lead foreign experienced managers to either increase or decrease employee compensation. For example, the greater scrutiny and monitoring from directors, investors, and media (Yuan and Wen, 2018) may drive foreign experienced managers to enhance performance through cost-saving strategies, such as reducing employee compensation (Sheaffer *et al.*, 2009), thereby driving short-term profitability and freeing internal capital liquidity (Klasa *et al.*, 2009; Matsa, 2010; Kong *et al.*, 2020).

Alternatively, they may seek to implement value-added strategies such as investment in innovation (Yuan and Wen, 2018), which typically requires higher skilled labor. Enhancing long-term firm performance and value is more complex than simply cutting costs, as it requires teamwork rather than an individual's effort (Hall *et al.*, 2005). Thus, the improved organizational behaviors are not only subject to managerial ability but also an outcome from other parties' efforts such as employees. The efficiency wage theory argues that the excess payment to employees increases firm performance by strengthening employees' loyalty (Stiglitz, 1974; Salop, 1979), attracting high-skilled employees (Weiss, 1980; Malcomson, 1981) and retaining talented employees (Albinger and Freeman, 2000). Given skilled managers are more likely to hire high-skilled workers for facilitating firm performance (Glaeser and Berry, 2006), foreign experienced managers may implement value-added strategies through hiring and retaining a high proportion of skilled employees to improve firm performance. Previous research also suggests foreign experience managers pursue value-added strategies, including investment in innovation (Yuan and Wen, 2018), corporate sustainable development and green investment (Wang *et al.*, 2022; Quan *et al.*, 2023) and value-enhancing corporate risk-taking activities (Sun *et al.*, 2023).

While foreign experience managers could be associated with higher or lower employee compensation, on balance, we argue a positive relationship is most likely. The decision to hire costly "super star" foreign experienced managers is more likely to be made to drive complex value-added strategies within a firm, rather than simply to cut costs. As such, we hypothesize the following:

H1. Managerial foreign experience is positively associated with employee compensation.

3. Data and methodology

Our sample consists of all firms listed on the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) from 2008 to 2016. The data is from the China Stock Market and Accounting Research database (CSMAR). We start the sample from 2008 as CSMAR provides executives' profiles and backgrounds from that year. The data of corporate employees' structure is retrieved from the Resset database. We exclude financial firms and observations with missing values, which results in 16,026 firm-year observations.

Unlike Western markets, the chairman in Chinese listed firms takes the most powerful managerial position and is concerned with daily operational matters (Kato and Long, 2006). As such, we define foreign experienced managers as CEO, or chairman, who have worked or studied outside the mainland of China. We manually collect information on managers' academic backgrounds and countries where they gained their foreign experience from their resumes, which are available in the CSMAR database. We crosscheck the sample with Baidu (<http://baike.baidu.com>), Sina (<http://finance.sina.com.cn>) and annual reports retrieved from the firms' websites. Following Yuan and Wen (2018), we then exclude individuals who gained their experience from foreign branches of Chinese firms (an office of a Chinese firm overseas, etc.) or worked for Chinese branches of foreign firms (an office of a foreign firm in China, etc.) to rule out non-pure managerial foreign experience. Therefore, managerial foreign experience (*FE dummy*) is an indicator variable which equals one if a firm's CEO or chairman has foreign experience, and zero otherwise. According to the chart in Appendix 2, the number of managers who have foreign experience increased across the sample period, from 4.3% in 2008 to 20.46% in 2016.

3.1 Employee compensation measures

Following Li *et al.* (2020), we define our dependent variable employee compensation (*Emp compensation*) as the natural logarithm of the "paid for and on behalf of employees" reported

in cash flow statements, plus the change in “wages payable” from the balance sheet in a given year, minus top executives’ compensation in the previous year, divided by the total number of employees in a firm. We also use the industry-adjusted employee compensation (*Adj comp*) as the second measure of employee compensation. The variable *Adj comp* is the natural logarithm of one plus the ratio of average labor compensation for a firm to the median compensation of a given industry and year.

3.2 Methodology

To test our hypothesis, [equation \(1\)](#) is applied for the regression models [\[3\]](#):

$$\begin{aligned}
 \text{Emp compensation or Adj comp}_{i,t} = & \alpha + \beta_1 FE \text{ dummy}_{i,t} + \beta_2 \text{quick ratio}_{i,t-1} + \beta_3 \text{leverage}_{i,t-1} \\
 & + \beta_4 \text{firm size}_{i,t-1} + \beta_5 \text{top1}_{i,t-1} \\
 & + \beta_6 \text{labor intensity}_{i,t-1} + \beta_7 \text{indep}_{i,t-1} + \beta_8 \text{bsize}_{i,t-1} \\
 & + \beta_9 \text{insti}_{i,t-1} + \beta_{10} \text{tangible}_{i,t-1} + \beta_{11} \text{Std_cfo}_{i,t-1} \\
 & + \beta_{12} \text{Std_nethire}_{i,t-1} + \beta_{13} \text{otherinvestment}_{i,t} \\
 & + \beta_{14} \text{div}_{i,t-1} + \beta_{15} \text{big4}_{i,t-1} + \beta_{16} \text{soe}_{i,t-1} + \beta_{17} \text{duality}_{i,t-1} \\
 & + \beta_{18} \text{GDP_Growth}_{i,t-1} + \beta_{19} \text{inflation}_{i,t-1} \\
 & + \beta_{20} \text{Money_supply growth}_{i,t-1} + \varepsilon
 \end{aligned} \tag{1}$$

where *Emp compensation* and *Adj comp* are the measures of employee compensation, and the *FE dummy* is defined as the measure of managerial foreign experience. Following [Ben-Nasr and Alshwer \(2016\)](#), [Khedmati et al. \(2020\)](#) and [Kong et al. \(2020\)](#), we also add a set of control variables which may significantly impact firms’ labor investment decisions, including quick ratio (*quick ratio*), financial leverage (*leverage*), firm size (*firm size*), return on assets (*roa*), the largest shareholdings (*top1*), labor intensity (*labor intensity*), ratio of independent directors (*indep*), board size (*bsize*), institutional ownership (*insti*), percentage of tangible assets (*tangible*), volatility of operating cash flow (*Std_cfo*), volatility of net hiring (*Std_nethire*), other non-labor investment (*otherinvestment*), dividend payout (*div*), audit quality (*big4*), ultimate controller (*soe*), CEO and chairperson duality (*duality*), growth of provincial GDP (*GDP_Growth*), inflation rate (*inflation*) and the growth of money supply (*Money_supply growth*). We use industry-year fixed effect to examine the relationship between managerial foreign experience and employee compensation in China, and the standard errors are clustered by firm level. All the variable definitions are reported in [Appendix 1](#).

[Table 1](#) reports the summary statistics. The employee compensation has a mean of RMB78,905, which is similar to [Li et al. \(2020\)](#) and [Wei et al. \(2020\)](#). On average, 10.9% of our observations have foreign experienced managers. In our sample, about half of the firms are state controlled. Firms’ largest shareholders on average own 35.4% of issued equity, while firms’ average quick ratio is 1.129, and on average firms have 48.1% financial leverage and 24.9% tangible assets, while their boards comprise 36.9% independent directors. With regard to the macroeconomic variables, GDP growth throughout all provinces is 12.3% on average, the inflation rate is 2.8%, and the growth rate of money supply from the central bank is 16%.

Table 1. Summary statistics

Variables	Obs.	Mean	SD	p25	p50	p75	p90
<i>Emp compensation</i>	16,026	11.276	0.637	10.938	11.3	11.672	12.083
<i>Emp compensation (in dollar)</i>	16,026	78,905	69,238	56,284	80,789	117,197	176,918
<i>Adj comp</i>	16,026	1.000	0.051	0.974	1.000	1.030	1.063
<i>FE dummy</i>	16,026	0.109	0.306	0.000	0.000	0.000	1.000
<i>quick_ratio_{t-1}</i>	16,026	1.129	1.532	0.355	0.649	1.193	2.371
<i>leverage_{t-1}</i>	16,026	0.481	0.224	0.314	0.482	0.640	0.758
<i>firm_size_{t-1}</i>	16,026	21.907	1.278	21.018	21.771	22.647	23.616
<i>roa_{t-1}</i>	16,026	0.033	0.064	0.011	0.032	0.061	0.098
<i>top1_{t-1}</i>	16,026	0.354	0.152	0.231	0.334	0.463	0.565
<i>labor_intensity_{t-1}</i>	16,026	10.702	10.005	4.000	8.100	14.000	23.000
<i>indep_{t-1}</i>	16,026	0.369	0.052	0.333	0.333	0.400	0.429
<i>bsize_{t-1}</i>	16,026	2.168	0.201	2.079	2.197	2.197	2.398
<i>insti_{t-1}</i>	16,026	0.068	0.081	0.008	0.036	0.098	0.183
<i>tangible_{t-1}</i>	16,026	0.249	0.178	0.109	0.216	0.359	0.509
<i>Std_cfo_{t-1}</i>	16,026	0.017	0.068	0.005	0.011	0.028	0.076
<i>Std_nethire_{t-1}</i>	16,026	0.211	1.828	0.079	0.160	0.342	0.802
<i>otherinvestment_t</i>	16,026	0.038	0.031	0.017	0.033	0.047	0.072
<i>div_{t-1}</i>	16,026	0.622	0.485	0.000	1.000	1.000	1.000
<i>big4_{t-1}</i>	16,026	0.059	0.236	0.000	0.000	0.000	0.000
<i>soe_{t-1}</i>	16,026	0.500	0.500	0.000	1.000	1.000	1.000
<i>duality_{t-1}</i>	16,026	0.211	0.408	0.000	0.000	0.000	1.000
<i>GDP_Growth_{t-1}</i>	16,026	0.123	0.059	0.077	0.105	0.166	0.214
<i>inflation_{t-1}</i>	16,026	2.824	1.836	1.920	2.620	4.820	5.550
<i>Money_supply growth_{t-1}</i>	16,026	16.012	4.407	13.340	14.390	17.790	19.730

Note(s): This table reports the summary statistics of our baseline model. All variables are defined in [Appendix 1](#)

Source(s): Authors' own work

4. Empirical results

[Table 2](#) reports the estimated result of [equation \(1\)](#), which examines the effect of managerial foreign experience on employee compensation. The coefficients for *FE dummy* are positive and significantly related to both employee compensation measures at the 1% level. Economically, firms that have foreign experienced managers (90th percentile of *FE dummy*), on average, pay higher employee compensation than firms without foreign experienced managers, with a difference of RMB6,370 (8% more) higher compensation per employee on average, holding the other explanatory variables constant at their mean values [\[4\]](#).

A number of our control variables are statistically significant. The firm size, ROA, top shareholdings, institutional ownership, dividend, top 4 auditing companies, and state-owned firms have positive relationships with employee compensation, whereas leverage, labor intensity, investment on tangible assets and other investments have negative impacts on employee compensation. The coefficients of the control variables are qualitatively similar to those found in previous studies (e.g. [Khedmati et al., 2020](#); [Wei et al., 2020](#); [Luo et al., 2020](#); and [Shi, 2024](#)).

We also report the result of propensity score matching (PSM) test to check the robustness and address self-selection bias of our baseline result. We first estimate a probit model for the likelihood of firms hiring foreign experienced managers with a set of control variables in [equation \(1\)](#). We then calculate the propensity scores and produce a one-on-one matching

Table 2. Baseline results

Variable	Baseline		PSM	
	<i>Emp compensation</i>	<i>Adj comp</i>	<i>Emp compensation</i>	<i>Adj comp</i>
<i>FE dummy</i>	0.112*** (3.842)	0.010*** (3.936)	0.141*** (3.948)	0.013*** (4.015)
<i>quick_ratio_{t-1}</i>	0.007 (1.000)	0.001 (1.041)	0.013 (1.426)	0.001 (1.368)
<i>leverage_{t-1}</i>	-0.250** (-2.553)	-0.023*** (-2.597)	-0.248* (-1.830)	-0.024** (-1.978)
<i>firm_size_{t-1}</i>	0.063*** (3.216)	0.006*** (3.250)	0.060** (2.272)	0.005** (2.236)
<i>roa_{t-1}</i>	0.739** (2.483)	0.062** (2.328)	0.106 (0.283)	0.005 (0.159)
<i>top1_{t-1}</i>	0.149* (1.743)	0.013* (1.690)	0.049 (0.357)	0.004 (0.347)
<i>labor_intensity_{t-1}</i>	-0.022*** (-15.844)	-0.002*** (-15.559)	-0.018*** (-7.626)	-0.002*** (-7.503)
<i>indep_{t-1}</i>	-0.203 (-0.822)	-0.022 (-1.012)	0.156 (0.374)	0.007 (0.193)
<i>bsize_{t-1}</i>	-0.057 (-0.768)	-0.006 (-0.907)	-0.003 (-0.025)	-0.002 (-0.241)
<i>insti_{t-1}</i>	0.286** (2.224)	0.025** (2.184)	0.374* (1.754)	0.034* (1.810)
<i>tangible_{t-1}</i>	-0.283*** (-3.666)	-0.024*** (-3.506)	-0.253 (-1.498)	-0.022 (-1.471)
<i>Std_cfo_{t-1}</i>	-0.020 (-0.090)	-0.006 (-0.277)	-0.033 (-0.090)	-0.005 (-0.161)
<i>Std_nethire_{t-1}</i>	0.006 (1.181)	0.000 (1.087)	0.012* (1.710)	0.001 (1.583)
<i>otherinvestment_t</i>	-1.039** (-2.340)	-0.101** (-2.515)	0.261 (0.442)	0.016 (0.314)
<i>div_{t-1}</i>	0.070*** (2.969)	0.006*** (2.956)	0.111** (2.350)	0.010** (2.315)
<i>big4_{t-1}</i>	0.117* (1.686)	0.011* (1.786)	0.198** (2.240)	0.018** (2.325)
<i>soe_{t-1}</i>	0.176*** (6.236)	0.016*** (6.302)	0.108** (2.133)	0.010** (2.229)
<i>duality_{t-1}</i>	0.011 (0.418)	0.001 (0.509)	-0.000 (-0.007)	-0.000 (-0.032)
<i>GDP_Growth_{t-1}</i>	-1.131*** (-3.067)	-0.103*** (-3.111)	-1.776** (-2.085)	-0.167** (-2.229)
<i>inflation_{t-1}</i>	-0.069*** (-4.302)	0.005*** (3.176)	-0.018 (-0.503)	0.010*** (2.977)
<i>Money_supply_growth_{t-1}</i>	-0.028*** (-7.225)	0.001*** (4.150)	-0.017** (-2.427)	0.003*** (4.181)
<i>Constant</i>	10.966*** (24.166)	0.893*** (21.931)	10.560*** (16.476)	0.863*** (15.227)
Observations	16,026	16,026	3,350	3,350
Adjusted R-squared	0.127	0.083	0.113	0.083
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Note(s): This table reports the results of OLS regression analysis and PSM analysis, consisting of 16,026 and 3,490 firm-year observations, respectively. The dependent variables are *Emp compensation* and *Adj comp*, the measurements of employee compensation, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year with standard errors clustered by firm across the two models. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

with the nearest neighbour between the treatment group and control group [5]. Our treatment group consists of firm-year observations where foreign experienced talents serve as managers in the firms. Our control group is selected by firms which have never hired foreign experienced managers. Finally, we rerun [equation \(1\)](#) with our PSM selected sample. According to [Table 2](#), the significance of *FE dummy* remains qualitatively the same.

Taken together, our results suggest that foreign experienced managers are associated with high employee compensation and this relationship is not influenced by self-selection bias.

4.1 Endogeneity and robustness checks

The positive relationship between managerial foreign experience and employee compensation may be driven by endogeneity bias. For example, reverse causality can be a potential concern as firms with greater employee compensation might be able to afford to hire managers with foreign experiences, who usually demand higher wages and could be competitive in the job market. In addition, some omitted variables, such as managers other characteristics could also drive the results. In the following sections, we apply a

set of tests to address potential endogeneity concerns and test the robustness of our results, including IV test, DID test, multiple fixed effects, using alternative dependent or independent variables and adding additional managers' characteristics as controls.

4.1.1 Instrumental variables test. We first adopt the two-stage least square (2SLS) IV test to address the endogeneity concerns. We use external shocks as instruments, which should only have a possible impact on our explanatory variable (*FE dummy*), but not on our dependent variables (employee compensation measures). Our first instrument variable is *christian*, following Dai *et al.* (2018) and Tao *et al.* (2022). It is defined as the number of Christian colleges built by missionaries by 1920 for each province. Dai *et al.* (2018) argue that the Christian colleges import Western values and culture, which may impact local culture. Further, such influences may increase the opportunities for local residents to go abroad or increase the possibility for foreign experienced talents to come and work in these areas [6]. In addition, the Chinese government enacted a series of policies to attract foreign experienced talents to live and work in China. Therefore, following Giannetti *et al.* (2015), we use the Thousand Talents Plan, which was enacted in 2008, as the event. Different provinces enacted their allowance policies at different times following the plan's enactment, which allows us to build our instrument variable. The introduction of provincial policies is an exogenous influence on the supply of foreign experienced talents, but these policies do not impact compensation paid to the "rank and file" employees. We use *policy* as our second instrument variable, which is equal to one in years of the Thousand Talents policy implementation for each province, and zero otherwise. Both of our IVs do not have direct influence on employee compensation.

For the first stage result presented in Table 3, the coefficients on *christian* and *policy* are positive and significant at the 10% and 1% levels, respectively, meaning the IVs are highly correlated with managers with foreign experience. The value of F-statistics and the *p*-value of the Hansen J-statistic indicate that our IVs are valid and not weak. In the second stage analysis, both *FE dummy* coefficients are positive and significantly related to employee compensation measures at the 1% level, suggesting that our results are not influenced by endogeneity concerns such as reverse causality and omitted variables.

4.1.2 Difference-in-difference analysis. Second, we use CEO turnover in a DID setting to address the endogeneity issues that may affect the foreign experiences of managers and employee compensation relationship [7]. In detail, we follow Huang and Kisgen (2013) and Sun *et al.* (2023) to first identify firms that experience a transition from CEOs without foreign experience to CEOs with foreign experience as our treatment group. Next, we identify firms that transit from having a non-foreign experienced CEO to another CEO without foreign experience as the control group. Given firms might change CEOs for specific purposes, we exclude CEO turnover caused by dismissal, resignations and position transfers in our sample, as these types of turnovers might be endogenous (e.g. firms might change CEOs for specific purposes). The DID sample is then constructed based on firm-year observations 2 years prior to and 2 years after the change in CEO [8], excluding the transition year *t*. Given the sample setting, we exclude any CEO turnovers that occur less than 2 years from the event. As such, we have a smaller sample size in comparison with our full sample. We initially consider using the PSM method for the DID test. However, as the above DID method has very strict sample selection rules, applying PSM affects the tests' validity because of the substantial reduction of observations (the PSM DID sample size results in fewer than 100 observations). Therefore, we follow the DID method used by others (e.g. Huang and Kisgen, 2013; Yao *et al.*, 2020), and our DID model is as follows [9]:

Table 3. Instrumental variable test

Variable	First step	Employee compensation	Adj comp
<i>FE dummy</i>		4.507*** (2.947)	0.394*** (2.934)
<i>christian</i>	0.019* (1.787)		
<i>policy</i>	0.015*** (2.978)		
<i>quick_ratio_{t-1}</i>	0.006 (1.540)	-0.019 (-0.966)	-0.002 (-0.939)
<i>leverage_{t-1}</i>	-0.029 (-1.112)	-0.107 (-0.686)	-0.010 (-0.746)
<i>firm_size_{t-1}</i>	0.004 (0.592)	0.047 (1.415)	0.004 (1.471)
<i>roa_{t-1}</i>	0.014 (0.239)	0.664* (1.713)	0.056 (1.620)
<i>top1_{t-1}</i>	-0.007 (-0.213)	0.158 (0.899)	0.014 (0.886)
<i>labor_intensity_{t-1}</i>	0.000 (0.289)	-0.022*** (-8.780)	-0.002*** (-8.730)
<i>indep_{t-1}</i>	-0.030 (-0.325)	-0.018 (-0.039)	-0.006 (-0.153)
<i>bsize_{t-1}</i>	0.024 (0.866)	-0.149 (-1.024)	-0.014 (-1.100)
<i>insti_{t-1}</i>	0.060 (1.056)	0.056 (0.194)	0.005 (0.194)
<i>tangible_{t-1}</i>	0.061** (2.045)	-0.507*** (-2.984)	-0.043*** (-2.920)
<i>Std_cfo_{t-1}</i>	0.145 (1.248)	-0.705 (-1.176)	-0.065 (-1.240)
<i>Std_nethire_{t-1}</i>	-0.003 (-1.410)	0.018 (1.618)	0.002 (1.562)
<i>otherinvestment</i>	-0.054 (-0.514)	-0.761 (-1.203)	-0.077 (-1.369)
<i>div_{t-1}</i>	0.006 (0.754)	0.031 (0.695)	0.003 (0.714)
<i>big4_{t-1}</i>	0.081*** (2.962)	-0.267 (-1.444)	-0.023 (-1.387)
<i>soe_{t-1}</i>	-0.070*** (-5.668)	0.489*** (3.922)	0.043*** (3.949)
<i>duality_{t-1}</i>	-0.021* (-1.716)	0.095 (1.444)	0.009 (1.479)
<i>GDP_Growth_{t-1}</i>	0.017 (0.134)	-0.676 (-1.057)	-0.063 (-1.120)
<i>inflation_{t-1}</i>	-0.014** (-2.212)	-0.069* (-1.700)	0.011*** (3.216)
<i>Money_supply growth_{t-1}</i>	0.001 (0.284)	0.002 (0.184)	0.001 (0.699)
<i>Constant</i>	0.000 (0.002)	10.163*** (13.313)	0.867*** (12.888)
Observations	16,026	16,026	16,026
Adjusted R-squared	0.037	–	–
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes
Cragg–Donald Wald F statistic	22.995***	–	–
Hansen J-statistic p value	0.34	–	–

Note(s): This table reports the results of 2SLS instrumental variable analysis, consisting of 16,026 firm-year observations. The dependent variables are *Emp compensation* and *Adj comp*, the measurements employee compensation, and the test variable is *FE dummy*. The first instrument, *christian*, is defined as the number of christian colleges built by missionaries up to 1,920 in each province. The second instrument, *policy*, is a dummy variable equal to one in years of the allowance policy implementation for each province, and zero otherwise. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

$$Emp\ compensation_{i,t}\ or\ Adj\ comp_{i,t} = \beta_0 + \beta_1 post_t * transition_i + \beta_2 post_t + \beta_3 transition_i + \sum_k \beta_k Controls_{k,i,t} + \varepsilon_{i,t} \quad (2)$$

where $post_t$ is a dummy variable which is one for firm-year observations following the change in CEO, and zero otherwise; $transition_i$ is a dummy variable equal to one if a firm i 's transition in year t is from a CEO without foreign experience to a CEO with foreign experience, and zero for firm i 's transition in year t from a CEO without any foreign experience to a CEO without any foreign experience.

If $H1$ of managerial foreign experience increasing employee compensation holds, the coefficient of the interaction term $post_t * transition_i$ will be significantly positive. [Table 4](#)

Table 4. Difference-in-differences test

Variable	<i>Emp compensation</i>	<i>Adj comp</i>
<i>post*transition</i>	0.166* (1.686)	0.016* (1.890)
<i>Post</i>	-0.007 (-0.117)	-0.001 (-0.164)
<i>Transition</i>	0.100 (0.720)	0.009 (0.743)
<i>Constant</i>	10.262*** (11.590)	0.837*** (10.357)
Observations	888	888
Adjusted R-squared	0.319	0.274
Controls	Yes	Yes
Industry	Yes	Yes
Year	Yes	Yes

Note(s): This table presents the DID analysis results for 888 firm-year observations. The dependent variables are *Emp compensation* and *Adj comp*, and the test variable is $post_t * transition_i$, where $post_t$ is a dummy variable, which is one for firm-year observations following the change in CEO, and zero otherwise; $transition_i$ is a dummy variable equal to one if a firm i 's transition in year t is from a CEO without foreign experience to a CEO with foreign experience, and zero for firm i 's transition in year t from a CEO without any foreign experience to a CEO with a foreign experience. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

presents the results of our DID test. In line with our conjecture, the estimated coefficients on $post_t * transition_i$ are positive and significant across the measures of employee compensation, indicating that managerial foreign experience can significantly increase employee compensation, ruling out the possibility that the results are affected by reverse causality and omitted variables.

4.1.3 Other robustness checks. We further apply multiple fixed effects in this section. First, following [Lawrence et al. \(2024\)](#), we use firm-year fixed effects to rule out the potential problems generated by time-invariant firm-specific characteristics [10]. According to Models 1–2 in Panel A of [Table 5](#), both *FE dummy* coefficients are significantly positive at the 10% level, indicating that the results are not driven by time-invariant firm characteristics.

Second, to address the endogeneity concerns of omitted individuals' characteristics, we follow [Gormley and Matsa \(2014, p. 644\)](#), [Hegde and Mishra \(2019\)](#) and [Mishra \(2021\)](#) in using the 2SLS strategy within the CEO fixed-effects framework as managers' foreign experience is practically orthogonal to other individuals' characteristics. Specifically, we first retrieve residuals by regressing both of our employee compensation measures on all control variables in [equation \(1\)](#) with CEO, industry- and year-fixed effects, respectively. We then regress both group-average residuals (*Resid_comp* and *Resid_Adjcomp*) estimated in the first step with *FE dummy* and all control variables in the second step, including industry and year fixed effects, respectively. The results are reported in Models 3–6 of Panel A in [Table 5](#). In the second step results, *FE dummy* is positively and significantly associated with *Resid_comp* and *Resid_Adjcomp* at the 1% level, ruling out the potential bias that our results are affected by omitted individuals' characteristics [11].

To further control for managers' other characteristics [12], we add additional managerial characteristics of CEO and chairman age and gender to [equation \(1\)](#) and DID sample tests. The results are shown in Panel B of [Table 5](#). The positive relationship between managerial foreign experience and employee compensation remains unchanged after controlling other managerial characteristics. Along with the CEO fixed effects in Panel A of [Table 5](#), the

Table 5. Continued

Variable	1	2	3	4	5
	<i>Aggr_comp</i>	<i>Emp compensation</i>	<i>Adj comp</i>	<i>Emp compensation</i>	<i>Adj comp</i>
<i>Panel C. Aggregate employee compensation and chairman and CEO foreign experience</i>					
<i>FE dummy</i>	0.069*** (2.769)				
<i>FE chair</i>		0.064** (2.577)	0.006*** (2.792)		
<i>Constant</i>	-0.861*** (-2.493)	11.259*** (45.864)	0.921*** (41.765)	0.067*** (2.371)	0.007** (2.533)
Observations	16,026	16,026	16,026	16,026	16,026
Adjusted R-squared	0.795	0.349	0.266	0.349	0.266
Controls	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes

Note(s): Panel A reports the regression results by firm-fixed effect in Models 1 and 2, and CEO-fixed effects with 2SLS analysis in Models 3–6. Panel B reports regression results controlling for additional managers' characteristics for both the baseline regression and the DID test. Panel C reports the results using aggregate employee compensation as an alternative dependent variable in Model 1, while Models 2–5 report the results of the effect of both foreign experienced chairman and CEO on employee compensation, respectively. All variables are reported in [Appendix 1](#). *, **, and *** represent significance at the 90, 95 and 99% confidence levels, respectively.

Source(s): Authors' own work

results have further confirmed that our baseline results are not impacted by managers' other characteristics.

Finally, for robustness checks, we first use an alternative measure of employee compensation. Following [Wei et al. \(2020\)](#), we use the firm-level aggregate employee pay to measure employee compensation. The variable *Aggr_comp* is measured as the natural logarithm of aggregate employee compensation minus executives' compensation. According to Model 1 of Panel C of [Table 5](#), the coefficient on *FE dummy* is positive and significant at the 5% level. In addition, given our measure of managerial foreign experience is an aggregate measure including both chairman and CEO, we separate the *FE dummy* between chairman and CEO to test whether both positions significantly affect employee compensation. The variable *FE Chair* is a dummy variable that equals one if the chairman of the firm has foreign experience, otherwise zero. Similarly, *FE CEO* is a dummy variable equals one if the CEO of the firm has foreign experience, otherwise zero. The results reported in Panel C of [Table 5](#) show both *FE Chair* and *FE CEO* are positively and significantly related to our employee compensation measures, and therefore both the chairman and CEO have significant influence on employee compensation.

Overall, the results show that the positive relationship between managers with foreign experience and employee compensation is robust after controlling for the endogeneity issues and other robustness checks.

4.2 High-skilled labor mechanism

Next, we investigate a potential mechanism for managers with foreign experience to increase employee compensation. According to efficiency wage theory, firms pay excess wages to employees to enhance employees' loyalty and improve productivity ([Kong et al., 2020](#)). Thus, apart from the superior knowledge that foreign experienced managers gained from other countries, they may also seek to improve their firm's human capital to improve firm performance. Therefore, we expect firms that have top managers with foreign experience to be associated with having a high proportion of high-skilled employees, and this association will increase employee compensation.

Following [Kong et al. \(2020\)](#) and [Cao and Rees \(2020\)](#), we define high-skilled employees based on their educational background (*High_edu*) and their job levels (*High_expert*). The variable *High_edu* is the proportion of employees who hold a bachelor's degree or above, while *High_expert* captures the proportion of employees whose jobs are located at zone 4 or 5 [13] using JobZone data from Occupational Information Network. We adopt the mediation analysis method proposed by [Baron and Kenny \(1986\)](#) and also perform a Sobel mediation test to validate the mediating effect. The results in [Table 6](#) indicate that managers with foreign experience increase high-skilled labor within firms. The Sobel mediation test reveals that a higher educated workforce (*High_edu*) accounts for approximately 22%–25% of the effect of foreign experienced managers on employee compensation, which is significant at the 5% level. Further, the Sobel test indicates greater expertise in a firm's workforce represents 11%–15% of the relationship between managerial foreign experience and employee compensation, which is significant at the 10% level.

Overall, our results are consistent with the efficiency wage channel, which argues that foreign experienced managers pay excess wages to attract and retain high-skilled employees as they pursue value-added strategies.

4.3 Do different types of foreign experience matter?

4.3.1 *Length of foreign experience, working and study experience.* It is possible that different types of foreign experience influence employee compensation differently. For

Table 6. Efficient wage channel

Variable	Emp compensation	Adj comp	High_edu	High_expert	Emp compensation	Adj comp	Emp compensation	Adj comp
<i>FE dummy</i>	0.102*** (3.594)	0.009*** (3.716)	0.022*** (2.367)	0.0156* (1.773)	0.075*** (2.724)	0.007*** (2.811)	0.087*** (3.232)	0.008*** (3.359)
<i>High_edu</i>					0.983*** (15.844)	0.096*** (14.355)		
<i>High_expert</i>								
Constant	10.718*** (24.895)	0.917*** (23.734)	0.347*** (3.458)	0.556*** (6.301)	10.251*** (24.582)	0.878*** (23.479)	0.967*** (13.621)	0.084*** (13.322)
<i>Indirect effect through channel</i>					0.025	0.002	0.0152	0.001
<i>Sobel test for indirect effect</i>					2.337***	2.336**	1.754*	1.754*
Observations	15,312	15,312	15,312	15,312	15,312	15,312	15,312	15,312
Adjusted R-squared	0.179	0.099	0.347	0.257	0.217	0.144	0.209	0.131
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Note(s): This table reports the results of the channel tests. This table presents the regression results for tests between *FE dummy* and the potential channel's measures of *High_edu*, which is the proportion of employees in a firm who hold a bachelor's degree or above, and *High_expert*, which is the proportion of a firm's employees who have highly skilled occupations. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, **, and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

example, [Zhang et al. \(2018\)](#) find managers with long-term foreign experience have a more pronounced influence on CSR than those with short-term foreign visiting experience. While [Yuan and Wen \(2018\)](#) find foreign study experience influences corporate innovation more significantly than foreign work experience. We argue that both the length of time [14] spent in other countries and practical work experience may have a stronger effect on employee compensation, as these afford foreign experienced managers more opportunities to observe foreign working environments and conditions. We therefore recategorize the *FE dummy* based on time and types of foreign experience to test whether such foreign experiences influence employee compensation.

First, we examine whether the duration of foreign experience matters. Following [Zhang et al. \(2018\)](#), we define CEO and chairman long experience as a dummy variable equal to 1 if they gained foreign working or studying experience longer than one year, and 0 otherwise. Second, the CEO's and chairman's short experience equals 1 if they gained foreign short-term visiting experience, and otherwise 0. We then rerun the regression for both chairman and CEO long- and short-term experiences in foreign countries and report the results in Panel A of [Table 7](#). The coefficients for *Chairman Long* and *CEO Long* are significant at the 1% in both models, but short duration coefficients are insignificant. Therefore, consistent with our expectations, we find that long term Chairman and CEO foreign experience matters, but short visiting experiences do not affect employee compensation.

Next, we form dummy variables based on chairman's and CEO's foreign working experience (*Chairman Working* or *CEO Working*) equal to one if a manager (chairman or CEO) has foreign working experience, otherwise 0. Further, managers' foreign study experience (*Chairman Study* or *CEO Study*) is a dummy variable that equals one if a manager (chairman or CEO) has foreign study experience, otherwise 0. According to Panel A of [Table 7](#), managers' foreign working experience is significant, whereas managers' foreign study experience is insignificant in both models. This implies that top managers' foreign work experiences are more likely to positively affect employee compensation.

4.3.2 Influence of institutional characteristics of foreign experience destinations. We also believe that the country where a manager gains their foreign experience from may influence their labor investment decisions, as foreign norms may affect executives' decision-making (e.g. [Zhang et al., 2018](#)). In countries with high employee protection, employee benefits are likely to be more important in terms of firm objectives than in countries with high investor protection ([Atanassov and Kim, 2009](#)). Thus, managers who gained experience from countries with high employee protection may have a more pronounced effect on employee compensation than those from countries with high investor protection. We use the index created by [Atanassov and Kim \(2009\)](#) to capture countries with high employee protection and high investor protection. Specifically, *High employee protection* is a dummy variable that equals one if the manager gained experience from countries [15] with top5 labor protection index, otherwise zero, while *High investor protection* is a dummy variable that equals to one if the manager gained experience from countries or regions [16] with top5 investor protection index, otherwise zero.

The results in Panel B of [Table 7](#) show the *High employee protection* coefficients are positive and significant on employee compensation measures at the 1% level, whereas the coefficients of *High investor protection* are insignificant on employee compensation measures, suggesting that managers gaining their experience from countries with high labor protection have a more pronounced effect on increasing employee compensation than those from countries with high investor protection.

Table 7. Do different types of foreign experience matter?

Variable	Emp compensation	Adj comp	Emp compensation	Adj comp	Emp compensation	Adj comp
Panel A. Length of foreign experience and working versus study experience						
Chairman long	0.110*** (-3.312)	0.010*** (-3.426)				
Chairman short	0.075 (-1.014)	0.006 (-0.973)				
CEO long	0.132*** (-3.557)	0.012*** (-3.648)				
CEO short	0.083 (-0.835)	0.006 (-0.726)				
Chairman working			0.128*** (-3.434)	0.012*** (-3.572)		
Chairman study			0.048 (-1.178)	0.004 (-1.171)		
CEO working					0.161*** (-3.282)	0.161*** (-3.278)
CEO study					0.035 (-0.839)	0.035 (-0.834)
Constant	11.022*** (-23.725)	0.901*** (-21.619)	11.020*** (-23.748)	11.901*** (-24.133)	11.018*** (-23.741)	11.018*** (-23.743)
Observations	16,026	16,026	16,026	16,026	16,026	16,026
Adjusted R-squared	0.139	0.079	0.139	0.116	0.139	0.127
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Panel B. Influence of institutional characteristics of foreign experience destinations						
High employee protection						
High investor protection						
Constant	0.212*** (3.656)	-0.022 (-0.651)				
Observations	11.327*** (42.652)	16,026				
Adjusted R-squared	0.304	Yes				
Controls	Yes	Yes				
Industry	Yes	Yes				
Year	Yes	Yes				
						Adj comp
						0.028*** (3.112)
						0.003 (0.820)
						0.900*** (21.693)
						16,026
						0.085
						Yes
						Yes
						Yes

Notes: This table reports the results of the impact of different types of foreign experience. In Panel A, the test variables are based on Chairman or CEO long or short experience overseas, as well as foreign working or study experience. In Panel B, the test variables are whether chairman or CEO gained their offshore experience in High employee protection countries or High investor protection countries. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in Appendix 1. *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

Overall, we find that the type and length of foreign experience managers have and where they obtain that experience are likely to influence what, if any, impact they have on employee compensation.

4.4 Do firm characteristics matter?

4.4.1 Excess cash holding. Previous literature indicates the importance of maintaining stable employment levels, especially for firms that are heavily reliant on high-skilled employees because of the high replacement costs associated with firing, hiring and training new employees (Oi, 1962; Dolfin, 2006; Blatter *et al.*, 2012; Ghaly *et al.*, 2017). However, maintaining stable employment levels may weaken firms' ability to survive future cash flow shocks (Ghaly *et al.*, 2017). Moreover, Ghaly *et al.* (2017) argue that firms hold more cash to strengthen their financial ability for aggressive hiring strategies (e.g. raiding rivals), as well as retaining and attracting talented employees. Likewise, firms with foreign experienced managers may hold excess precautionary cash for increased probability of financial distress, stemming from high employee compensation, and seek high-skilled employees. Therefore, if foreign experienced managers increase in employee compensation is a rational decision, then we would expect the relationship between managerial foreign experience and employee compensation to be more pronounced in firms with high excess cash holdings than those with low cash holdings. A firm is defined as having high excess cash holdings [17] if its excess cash holdings are above the median value of our sample, and low excess cash holding otherwise.

As shown in Panel A of Table 8, the *FE dummy* coefficients are only positive and significant at the 1% level for firms with high excess cash holdings, which is in line with our expectation that foreign experienced managers rationally increase employee compensations by holding more precautionary cash. This result also supports the motivation of holding precautionary cash suggested by Keynes (1936).

4.4.2 Operating leverage. Cui *et al.* (2018) indicate that increased employee compensation will increase corporate operating leverage, which may lead to high financial distress and bankruptcy risk. Therefore, foreign experienced managers of high operating leverage firms might be less likely to increase employee compensation to reduce financial distress and bankruptcy risk. Thus, we expect operating leverage will moderate the relationship between managerial foreign experience and employee compensation. Following Serfling (2014), we calculate operating leverage [18] as the percentage change in operating income for a percentage change in sales. The result reported in Panel B of Table 8 shows the coefficients of *FE dummy* are only positive and significant at the 1% level in firms with low operating leverage, which is consistent with our conjecture that foreign experienced managers do not increase employee compensation when firms experience high level of financial distress.

Overall, our findings indicate that foreign experienced managers' strategy of increasing employee compensation is rational, as it is only persistent when firms have stable financial conditions.

4.4.3 State versus private firms. We further test whether the relationship between managerial foreign experience and employee compensation will alter because of government intervention. The effect of managers with foreign experience may be less pronounced in SOEs because of government intervention. We partition our sample between SOEs and private firms. Panel C of Table 8 indicates that the coefficients of *FE dummy* are positive and significant at the 1% and 5% level in the SOE and private firm subsamples, suggesting that managerial foreign experience has a positive and significant influence on employee compensation in both SOEs and private firms.

Table 8. The impacts of firm characteristics

Variable	High		Low	
	<i>Emp compensation</i>	<i>Adj comp</i>	<i>Emp compensation</i>	<i>Adj comp</i>
<i>Panel A. Cash holdings</i>				
<i>FE dummy</i>	0.079*** (2.745)	0.007*** (2.928)	0.052 (1.184)	0.005 (1.198)
<i>Constant</i>	9.236*** (19.746)	0.884*** (20.942)	9.006*** (13.091)	0.866*** (13.991)
Observations	7,978	7,978	7,978	7,978
Adjusted R-squared	0.169	0.114	0.124	0.087
Controls	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
<i>Panel B. Operating leverage</i>				
<i>FE dummy</i>	0.050 (1.501)	0.005 (1.563)	0.082** (2.110)	0.008** (2.194)
<i>Constant</i>	9.244*** (19.373)	0.890*** (20.830)	8.922*** (12.746)	0.855*** (13.565)
Observations	8,013	8,013	8,013	8,013
Adjusted R-squared	0.149	0.201	0.099	0.088
Controls	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
<i>Panel C. SOEs versus private firms</i>				
	SOEs		Private firms	
<i>FE dummy</i>	0.191*** (3.212)	0.017*** (3.211)	0.079** (2.483)	0.007*** (2.613)
<i>Constant</i>	12.210*** (17.454)	1.005*** (15.903)	10.119*** (16.931)	0.822*** (15.587)
Observations	7,965	7,965	8,061	8,061
Adjusted R-squared	0.137	0.092	0.127	0.071
Controls	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Note(s): This table reports the results on the impacts of different firm characteristics. The dependent variables are *Emp compensation* and *Adj comp*, the measurements of employee compensation, and the test variable is *FE dummy*. Panel A reports the results based on the median value of excess cash holdings; Panel B reports the results based on the median level of operating leverage; Panel C reports the results based on whether the ultimate controller of the firm is an SOE or private firm. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

However, while the effect of managerial foreign experience on employee compensation is consistent for both SOEs and private firms, the consequence for foreign experienced managers to increase employee compensation may differ in SOEs and private firms because of different motivations or goals. SOEs are prioritized to complete political goals such as focusing on employees' responsibility, whereas private firms are more likely to maximize shareholders' interests through enhancing firm value ([Jiang and Kim, 2020](#)). We further investigate our conjecture in the next section.

5. Drivers and impacts of high employee compensation in state-owned enterprises and private firms

5.1 Managerial foreign experience and labor investment efficiency

Although we provide the evidence that foreign experienced managers are associated with high employee compensation, it is not clear whether foreign experienced managers

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overinvest in labor and hence increase labor costs. Therefore, in this section, we first investigate the impact of managerial foreign experience on labor investment efficiency. Following Jung *et al.* (2014), Ben-Nasr and Alshwer (2016), and Luo *et al.* (2020), we calculate a firm's inefficient labor investment by regressing *net_hiring* (the percentage change in the number of employees) over a set of firm economic variables. The model is shown below:

$$\begin{aligned} net_hire_{i,t} = & \beta_0 + \beta_1 sales_growth_{i,t-1} + \beta_2 sales_growth_{i,t} + \beta_3 \Delta roa_{i,t} + \beta_4 \Delta roa_{i,t-1} \\ & + \beta_5 roa_{i,t} + \beta_6 return_{i,t} + \beta_7 firm_size_{i,t-1} + \beta_8 quick_ratio_{i,t-1} \\ & + \beta_9 \Delta quick_ratio_{i,t-1} + \beta_{10} \Delta quick_ratio_{i,t} + \beta_{11} leverage_{i,t-1} \\ & + \beta_{12} AUR_{i,t-1} + \beta_{13} loss_dum1_{i,t-1} + \beta_{14} loss_dum2_{i,t-1} \\ & + \beta_{15} loss_dum3_{i,t-1} + \beta_{16} loss_dum4_{i,t-1} + \beta_{17} loss_dum5_{i,t-1} \\ & + IndustryFE + \varepsilon_{i,t} \end{aligned} \quad (3)$$

where *sales_growth* is the percentage change in sales; *roa* is the net income over total assets; *return* is the annual stock return; *firm_size* is the natural logarithm of total assets; *quick_ratio* is the sum of cash, short-term investment and receivables over current liabilities; *leverage* is total liabilities over total assets; *AUR* is the ratio of sales over total assets; and *loss_dums* are five indicators representing each interval of *roa* in the previous year of length 0.005 from 0 to -0.025. For example, *loss_dum1* equals one if *roa* in the previous year is between -0.005 and 0 and is zero otherwise, and *loss_dum2* equals one if *roa* in the previous year is between -0.010 and -0.005 and is zero otherwise. We also include industry fixed effects (*IndustryFE*) in the regression.

We then extract the residual from equation (3) and define it as abnormal net hiring. The absolute value of abnormal net hiring (*LIE*) is the proxy for inefficient labor investment. Therefore, a high value of abnormal net hiring (*LIE*) indicates a firm with more inefficient labor investment.

We report our regression results in Table 9. We also include managers' other characteristics in the tests to rule out their impact on our results. We find a negative and significant coefficient on managerial foreign experience. Consistent with Ben-Nasr and Alshwer (2016) and Khedmati *et al.* (2020), the negative signs on the *FE dummy* indicate a positive relationship between managerial foreign experience and labor investment efficiency. In other words, the negative *FE dummy* coefficients represent reduced inefficiency of labor investment. We then split our full sample into SOEs and private firms. While the *FE dummy* coefficients are negative in both subsamples, the improvement that managerial foreign experience has on *LIE* is only significant in private firms.

Overall, while we find that foreign experienced managers are positively associated with increased labor costs, they are not associated with worse labor investment efficiency in their firms.

5.2 Managerial foreign experience and total factor productivity

We then investigate the influence of foreign experienced managers on firm performance. Managers in private firms have priority to optimize firm performance, such as increasing total factor productivity (Jiang and Kim, 2020). However, the aggregate total factor productivity may be low in SOEs, as firms with heavy government intervention and political goals are associated with high resource misallocation in China (Cull *et al.*, 2015; Wei *et al.*, 2020).

Table 9. Labor investment efficiency (LIE)

Variable	Full sample <i>LIE</i>	SOE <i>LIE</i>	Private <i>LIE</i>
<i>FE dummy</i>	-0.324* (-1.751)	-0.302 (-0.756)	-0.398* (-1.914)
<i>Chairman age</i>	0.038 (1.465)	0.053* (1.718)	0.026 (0.682)
<i>Chairman gender</i>	0.217 (0.661)	0.431** (2.082)	0.024 (0.049)
<i>CEO age</i>	-0.699 (-1.149)	-0.041 (-0.048)	-1.373 (-1.341)
<i>CEO gender</i>	0.501** (2.244)	0.521** (2.051)	0.55 (1.329)
<i>Constant</i>	23.202*** (2.826)	13.721** (2.087)	30.761** (2.026)
Observations	16,026	8,021	8,005
Adjusted R-squared	0.007	0.013	0.005
Controls	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes

Note(s): This table reports the results of the impacts of foreign experienced managers on labor investment efficiency. The dependent variables are the absolute values of the residuals from [equation \(3\)](#), the measurements of labor investment efficiency (the higher *LIE*, the lower labor investment efficiency), and the test variable is *FE dummy*. Fixed effects are controlled by industry and year with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

Thus, we expect that increasing total factor productivity will be more of a motivation for foreign experienced managers to increase labor costs in private firms rather than SOEs.

Following [Giannetti et al. \(2015\)](#), we estimate total factor productivity (*TFP*) as the residuals from the regressions of the logarithm of firm sales on the logarithm of the number of employees, the logarithm of total assets, and the logarithm of the expenses for materials and other inputs by each industry and year. According to Panel A of [Table 10](#), the coefficient of *FE dummy* is positive and significant at the 5% level in explaining *TFP* in the private firm subsample. However, the *FE dummy* is not statistically different from zero in explaining *TFP* in our full sample and SOE subsample. This is consistent with our conjecture that the presence of foreign experienced managers is positively associated with total factor productivity in private firms, although not in SOEs.

5.3 Foreign experienced managers and employees' well-being

We also test whether foreign experienced managers affect employees' well-being. SOEs focus on the economy-based stability of social development [e.g. the local government officials may reduce labor employment layoffs after sales decline ([Gu et al., 2020](#))], whereas private firms focus on value maximization ([Jiang and Kim, 2015](#)). Managers in SOEs have more concerns about completing political goals such as improving employees' well-being ([Bai et al., 2006](#); [Kong et al., 2020](#)), which makes and strengthens valuable government connections to secure government subsidies and personal nonpecuniary benefits such as further political promotion. Building these government connections is even more critical for foreign experienced managers, who typically have fewer prior political ties compared to non-foreign experienced managers ([Giannetti et al., 2015](#)).

To design the test, we obtain the employee responsibility index (*Employee index*) from Hexun CSR scores [[19](#)]. The index incorporates employees' performance, employees' safety, and the care of employees (stock.hexun.com) [[20](#)]. The results are reported in Panel B of [Table 10](#). The coefficients on *FE dummy* are positive and significant at the 10% level in the

Table 10. Foreign experienced managers and total factor productivity and employee responsibilities

Variable	Full sample	SOEs	Private firms
<i>Panel A. Total factor productivity</i>			
	<i>TFP</i>	<i>TFP</i>	<i>TFP</i>
<i>FE dummy</i>	0.013 (1.351)	0.007 (0.554)	0.015** (2.263)
<i>Constant</i>	-0.353*** (-3.782)	-0.491*** (-4.007)	-0.292** (-2.233)
Observations	15,988	7,957	8,031
Adjusted R-squared	0.256	0.313	0.222
Controls	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes
<i>Panel B. Employee responsibility</i>			
	<i>Employee index</i>	<i>Employee index</i>	<i>Employee index</i>
<i>FE dummy</i>	0.320* (1.907)	0.676* (1.923)	0.164 (0.969)
<i>Constant</i>	-17.693*** (-10.602)	-18.747*** (-7.648)	-14.808*** (-6.423)
Observations	13,540	6,355	7,185
Adjusted R-squared	0.192	0.201	0.131
Controls	Yes	Yes	Yes
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes

Note(s): This table reports the results of the impacts of foreign experienced managers on employee responsibility (*Employee index*) and total factor productivity (*TFP*). Panel A reports the results of managerial foreign experience on *TFP*. Panel B reports the results of managerial foreign experience on *Employee index*. Fixed effects are controlled by industry and year, with standard errors clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

full sample and SOEs subsample, whereas they are positive but insignificant for private firms. Our results indicate that SOE managers with foreign experience increase employee compensation to achieve friendly employee treatment. This is consistent with foreign experienced managers focusing on the additional political and social goals in SOEs, which may also enhance their future political promotion opportunities through enhancing CSR performance ([Jiang and Kim, 2020](#)).

5.4 Employee compensation and shareholder value

We now focus on whether increased employee compensation through managerial foreign experience affects shareholder value. Conceivably, higher compensation could result in either higher or lower shareholder value. We use Tobin's Q (*Tobin's Q*) as the measure of market valuation. According to Panel A of [Table 11](#), the interaction terms between the *FE dummy* and employee compensation measures are positively related to *Tobin's Q* at the 1% and 5% levels, respectively, suggesting that the increased employee compensation through managerial foreign experience benefits shareholders by increasing corporate market valuation. This suggests that foreign experienced managers do not simply increase employee compensation for their own interests such as empire-building activities ([Chen et al., 2012](#); [Hall, 2016](#); [Prabowo et al., 2018](#)). In Panel B of [Table 11](#), we further test whether the value-enhancing result is different between SOEs and private firms. We find that the interaction term between the *FE dummy* and labor cost measures is only positive and significant to *Tobin's Q* for private firms. This result is consistent with our previous argument that foreign

Table 11. Employee compensation and shareholder value

Variable	Full sample			
	Tobins'Q		Tobins'Q	
<i>Panel A</i>				
<i>FE dummy*emp compensation</i>	0.278*** (2.713)			
<i>Emp compensation</i>	0.008 (0.320)			
<i>FE dummy*adj_comp</i>			2.715** (2.212)	
<i>Adj_comp</i>			0.037 (0.133)	
<i>FE dummy</i>	-2.977*** (-2.573)		-2.546** (-2.063)	
<i>Constant</i>	33.749*** (28.526)		33.822*** (28.559)	
Observations	16,025		16,025	
Adjusted R-squared	0.411		0.411	
Controls	Yes		Yes	
Industry	Yes		Yes	
Year	Yes		Yes	
	SOEs		Private firms	
	Tobins'Q	Tobins'Q	Tobins'Q	Tobins'Q
<i>Panel B</i>				
<i>FE dummy*emp compensation</i>	-0.094 (-0.888)		0.452*** (2.762)	
<i>Emp compensation</i>	0.001 (0.032)		0.029 (0.756)	
<i>FE dummy*adj_comp</i>			5.094*** (2.648)	
<i>Adj_comp</i>			0.267 (0.612)	
<i>FE dummy</i>	1.351 (1.084)	1.605 (1.165)	-4.941*** (-2.711)	-4.916*** (-2.585)
<i>Constant</i>	24.910*** (17.573)	25.046*** (17.289)	41.802*** (23.132)	41.931*** (23.267)
Observations	7,964	7,964	8,061	8,061
Adjusted R-squared	0.353	0.353	0.433	0.433
Controls	Yes	Yes		
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Note(s): This table reports the results of the increased employee compensation through managerial foreign experience and shareholder value. The dependent variable is *Tobin's Q*, and the test variables are the interaction between *FE dummy* and employee compensation measurements. Panel A shows the result in full sample. Panel B shows the results between SOEs and private firms subsamples. Fixed effects are controlled by industry, province and year and standard errors are clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

experienced managers in SOEs may prioritize political goals to enhance their future political promotions.

Overall, our results indicate that the increased employee compensation through foreign experienced managers is associated with enhanced firm value, particularly in private firms. Although the increased employee compensation in SOEs does not enhance firm value, neither does it harm them, suggesting that the completion of political goals is compensated with favors returned from the government ([Gu et al., 2020](#)).

5.5 Managerial foreign experience and labor adjustment costs

Given foreign experienced managers are associated with a high proportion of high-skilled employees, employee turnover may be costly as it entails incurring labor adjustment costs such as the costs of firing and hiring staff ([Anderson et al., 2003](#)). The labor cost stickiness is generated when the employee compensation is more sensitive to an increase rather than a decrease to an event ([Anderson et al., 2003](#)). An example of labor cost stickiness would be

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where labor costs increase by, say, 0.6% when the sales increase by 1% but decrease by only 0.3% when the sales decline by 1%. As foreign experienced managers prefer to hire high-skilled employees, it is unlikely for them to decrease wages or retrench high-skilled employees when sales decline because of the “talent war” and high labor adjustment costs. Thus, we anticipate higher labor cost stickiness in firms with foreign experienced managers.

Following Anderson *et al.* (2003), Ben-Nasr and Alshwer (2016) and Khedmati *et al.* (2020), we use equation (4) for our empirical test:

$$\begin{aligned} \text{Log}\left(\frac{\text{LabCost}_{i,t}}{\text{LabCost}_{i,t-1}}\right) = & \beta_0 + \beta_1 \text{Log}\left(\frac{\text{Rev}_{i,t}}{\text{Rev}_{i,t-1}}\right) + \beta_2 \text{Decr}_{i,t} * \text{Log}\left(\frac{\text{Rev}_{i,t}}{\text{Rev}_{i,t-1}}\right) \\ & + \beta_3 * \text{Decr}_{i,t} * \text{Log}\left(\frac{\text{Rev}_{i,t}}{\text{Rev}_{i,t-1}}\right) * \text{FE dummy}_{i,t} \\ & + \beta_4 \text{Decr}_{i,t} * \text{Log}\left(\frac{\text{Rev}_{i,t}}{\text{Rev}_{i,t-1}}\right) * \text{Controls}_{i,t} + \beta_5 \text{FE dummy}_{i,t} \\ & + \beta_6 \text{Controls}_{i,t} + \text{Year FE} + \text{Industry FE} + \text{Province FE} + \varepsilon_{i,t} \quad (4) \end{aligned}$$

where *LabCost* is the total employee compensation [21]; *Rev* is the total revenue; *Decr* is an indicator that equals one if the total revenue declined from the previous year, otherwise zero; *FE dummy* is our key explanatory variable for managerial foreign experience; *Controls* include the following variables: asset intensity (*AI*), which total assets divided by total revenue; *Suc_Decr* is a dummy variable of one if the firm experiences a revenue decline in both the current and the previous years, otherwise zero; *Loss* being a dummy of one for firms reporting a negative *ROA* in the previous year, otherwise zero; institutional ownership (*insti*); provincial *GDP growth* [22] (*GDP Growth*) and a set of fixed effects including industry, province [23] and year. The standard errors are clustered at the firm level. According to Table 12, β_1 is positive and β_2 is negative, indicating that labor cost is sticky (Ben-Nasr and Alshwer, 2016). The coefficient for $\text{Decr}_i * \text{Log}\left(\frac{\text{Rev}_i}{\text{Rev}_{i-1}}\right) * \text{FE dummy}_i$ is negative and significant at the 5% level, suggesting that foreign experienced managers increase labor cost stickiness. We further run the model between SOE and private firm subsamples. The results in Table 12 show that the coefficient of $\text{Decr}_i * \text{Log}\left(\frac{\text{Rev}_i}{\text{Rev}_{i-1}}\right) * \text{FE dummy}_i$ is only negative and significant in private firms, indicating that the labor cost stickiness generated by foreign experienced managers is more persistent in private firms than SOEs.

Overall, our findings indicate that although foreign experienced managers increase employee compensation through hiring and retaining high-skilled employees, it is also associated with greater labor cost stickiness because of the “talent war” and high labor adjustment costs, particularly in private firms. This finding is consistent with our findings in Section 4.4 on the capacity of firms to increase employee compensation. The higher costs of attracting and retaining skilled labor, coupled with managers’ reticence in letting go of skilled employees during downturns, essentially increase the fixed operating costs of labor, and therefore firms’ operating leverage. So, while the positive association found in the paper does not negatively affect firm value and, in fact, may increase value for certain firms, foreign experienced managers may also result in higher operating risks through increasing labor adjustment costs.

6. Conclusion

Foreign experienced managers are important to firms’ strategic decision-making. While prior research focuses on how foreign experienced executives improve firm performance, research

Table 12. Managerial foreign experience and employee compensations stickiness

Variable	Full sample	SOE	Private firms
	<i>Labor cost stickiness</i>	<i>Labor cost stickiness</i>	<i>Labor cost stickiness</i>
$\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})$	1.141*** (18.59)	1.087*** (10.348)	1.173*** (15.484)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})$	-0.675*** (-5.848)	-0.811*** (-4.767)	-0.653*** (-4.543)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{FE dummy}$	-0.238** (-2.677)	0.019 (0.125)	-0.341*** (-3.427)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{AI}_t$	-0.006 (-0.066)	0.042 (0.624)	-0.009 (-0.038)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{SucDecr}$	-0.035 (-0.498)	0.135 (1.531)	-0.054 (-0.649)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{Loss}_{t-1}$	-0.054 (-0.621)	-0.151 (-1.066)	-0.018 (-0.176)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{instit}$	0.809 (1.363)	1.354 (1.359)	0.228 (0.285)
$\text{Decr}^*\text{Log}(\text{Rev}_t/\text{Rev}_{t-1})^*\text{GDPGrowth}$	-0.903* (-1.812)	-0.860 (-1.440)	-0.677 (-0.879)
<i>FE dummy</i>	0.001 (0.119)	-0.002 (-0.196)	-0.001 (-0.067)
AI_t	-0.021*** (-2.736)	-0.012*** (-2.602)	-0.031** (-2.092)
<i>SucDecr</i>	-0.070*** (-11.005)	-0.062*** (-8.077)	-0.072*** (-7.709)
Loss_{t-1}	-0.093*** (-8.810)	-0.070*** (-5.350)	-0.123*** (-7.197)
<i>instit</i>	0.186*** (7.613)	0.194*** (5.459)	0.177*** (4.757)
<i>GDPGrowth</i>	0.171** (2.131)	0.164* (1.740)	0.169 (1.240)
<i>Constant</i>	0.091*** (4.065)	0.089*** (3.529)	0.096** (2.505)
Observations	15,823	7,862	7,961
Adjusted R-squared	0.397	0.358	0.423
Industry	Yes	Yes	Yes
Province	Yes	Yes	Yes
Year	Yes	Yes	Yes

Note(s): This table reports the results of managerial foreign experience and labor sticky costs, consisting of 15,823 firm-year observations. Fixed effects are controlled by industry, province and year, and standard errors are clustered by firm. All variables are reported in [Appendix 1](#). *, ** and *** represent significance at the 90, 95 and 99% confidence levels, respectively

Source(s): Authors' own work

on their impact on employee compensation, an investment that is related to an important corporate stakeholder, is unstudied. Studying labor investment is important, as it can be a sunk cost for investors if managers hire employees to build their own empire. Our study of foreign experienced managers in China helps fill this gap.

We find that in China, firms with foreign experienced managers are associated with significantly higher employee compensation. We argue that hiring and retaining a higher proportion of skilled employees is the potential channel through which managers with foreign experience increase employee compensation. We document that the relationship between managerial foreign experience and employee compensation is more pronounced in firms with flexible financial policies (e.g. excess cash holdings and low operating leverage).

Further, the drivers and impacts of increased employee compensation differ because of the different firm goals and incentives foreign experience managers face in SOEs and private firms. To seek future political promotion, foreign experienced managers in SOEs are more likely to focus on the additional political and social goals, such as social stability (e.g. employee treatment). We find a positive relationship between managerial foreign experience and employee responsibility in SOEs. Further, we do not find any evidence that the improved employee treatment in SOEs negatively impacts firm performance. On the other hand, foreign experienced managers association with higher employee compensation in private firms should be driven by a desire to improve firm performance for the goal of shareholders' wealth maximization. Consistent with this, we find managerial foreign experience is significantly related to labor investment efficiency and total factor productivity in private

firms. Moreover, the increased employee compensation will increase firm value for shareholders, particularly in private firms. However, the increase of employee compensation generates labor stickiness costs in private firms, which suggests such firms may face higher operating leverage risk.

It should be noted that the hand-collected data on foreign experience from CEO and Chairman CVs, covering the period from 2008 to 2016, is now relatively dated. While there is no clear reason to expect that a more recent sample would yield different conclusions, this does represent a limitation of the study. Future research could address this by incorporating more recent data, particularly in light of major global events such as the COVID-19 pandemic and rising geopolitical risks.

Notes

- [1.] We define foreign experienced managers as “returnees who have gained experience from overseas.”
- [2.] For more details, please see <https://opendata.pku.edu.cn/dataverse/esiec>
- [3.] All continuous variables are winsorized at the 1% and 99% levels.
- [4.] Given our dependent variable is scaled by the natural logarithm, we follow (Boubaker *et al.* 2015) to calculate the economic significance. Let $Emp\ compensation_1$ be the employee compensation of firms from the 90th percentile as $FE\ dummy$ starts equal to 1 at the 90th percentile. Using the average value of employee compensation in yuan of RMB78,905, the 90th percentile value of $FE\ dummy$ of 1 in Table 1 and the coefficient of $FE\ dummy$ of 0.112 in Table 2, we obtain $\ln(Emp\ compensation_1/RMB78,905) = 0.112 * [\ln(1+1) - \ln(1+0)]$. Thus, $Emp\ compensation_1 = 85,275 (= 78,905 * e^{[0.112 * (\ln(1+1) - \ln(1+0))]}$). Therefore, on average, foreign experienced managers increase employee compensation by RMB6,370 (85,275-78,905) per employee.
- [5.] In Appendix 3, we run mean difference tests to examine the validity of our propensity score matching. The differences of control variables between the treatment and control groups are all insignificant in PSM sample, indicating that our selected sample is well matched.
- [6.] We do not use *christian* to measure religious belief, as only around 2% of Chinese adults identify as Christian (Hackett and Tong, 2025).
- [7.] Following (Yao *et al.* 2020), we select CEO turnover as the benchmark in the DID test, as the CEO transition occurs more frequently than chairman turnovers, which allows us to incorporate more observations in the test.
- [8.] We contain 2 years prior to and following a CEO turnover to obtain more firms in our sample selection.
- [9.] Similar to (Huang and Kisgen 2013), rather than use a parallel trends check, we control for year-fixed effects in our DID models, as CEO turnover occurs at different dates for different firms.
- [10.] The fixed effects are grouped by firms rather than managers, and therefore it should not affect the validity of the test.
- [11.] In untabulated results, we repeat the same process using chairman fixed effects, and the results are qualitatively similar.
- [12.] We thank the reviewer for this valuable suggestion.
- [13.] Job zones rank occupations into five zones from low to high level, based on the requirements of educational background, experience and training to perform the occupation.
- [14.] We thank an anonymous referee for this suggestion.

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- [15.] These countries include France, Italy, Norway, Portugal and Spain.
- [16.] These countries and regions include Australia, Hong Kong, New Zealand, Singapore and the United Kingdom.
- [17.] Following (Xu *et al.* 2016), we measure excess cash holding as the residuals of a regression between firms' actual cash holding and a set of variables that include net income, firm size, net working capital, the standard deviation of operating cash flow over total assets, the market-to-book ratio and financial leverage with firm- and year-fixed effects.
- [18.] Using quarterly data from year t to year $t + 2$, we run the regression of operating income on sales for each firm. $Operating\ income_i = \alpha + \beta Sales_i + \varepsilon_i$, where operating leverage is computed as $\beta_i \left(\frac{Sales_i}{Operating\ income_i} \right)$, with $Sales_i$ and $Operating\ income_i$ being the sales and operating income averages for firm i over the three-year window.
- [19.] We lose some observations as Hexun started reporting CSR score from 2010.
- [20.] The details of Hexun CSR scores are available at <http://stock.hexun.com/2013-09-10/157898839.html>.
- [21.] *LabCost* is the same as *Emp compensation* in our paper. We use *LabCost* to be consistent with other papers.
- [22.] Ben-Nasr *et al.* (2016) and Khedmati *et al.* (2020) control for labor union rather than GDP growth. Given that the effect of labor unions is less prevalent in Chinese listed firms (Cui *et al.*, 2018), we control for local GDP growth, as the local economy has significant influence on labor cost stickiness in China (Xu and Sim, 2017).
- [23.] We include province-fixed effect as the labor sticky costs vary across regions in China (Xu and Sim, 2017).

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Appendix 1

Table A1. Definition of variables

Variables	Definition
<i>Emp compensation</i>	Natural logarithm of the average wage expenses in a given year after excluding top executives' compensation in year $t - 1$. Average wage expenses equal the amount of "paid for and on behalf of employees" reported in the cash flow statement plus changes in "wages payable" in the balance sheet, divided by the number of employees
<i>Adj comp</i>	The ratio of <i>emp compensation</i> over the median <i>emp compensation</i> in the related industry during the year
<i>LIE</i>	It is the absolute values of the residuals from equation (3)
<i>Aggr_comp</i>	The natural logarithm of aggregate employee compensation minus executives' compensation
<i>net_hire</i>	Percentage change in the number of employees from financial year $t - 1$ to financial year t
<i>Employee index</i>	The employee responsibility index retrieved from Hexun CSR score
<i>TFP</i>	The residuals of regressions followed by Giannetti et al. (2015)
<i>loan</i>	The ratio of bank loan to debt
<i>Tobin's Q</i>	Market value of equity plus the book value of total liability divided by the book value of total assets
<i>FE dummy</i>	Dummy variable equals 1 if a firm has a CEO or chairman with foreign experience, otherwise 0
<i>FE chair</i>	Dummy variable equals 1 if a firm has a chairman with foreign experience, otherwise 0
<i>FE CEO</i>	Dummy variable equals 1 if a firm has a CEO has foreign experience, otherwise 0
<i>Chairman working</i>	Dummy variable equals 1 if the chairman has foreign working experience, otherwise 0
<i>Chairman study</i>	Dummy variable equals 1 if the chairman has foreign study experience, otherwise 0
<i>CEO working</i>	Dummy variable equals 1 if the CEO has foreign working experience, otherwise 0
<i>CEO study</i>	Dummy variable equals 1 if the CEO has foreign study experience, otherwise 0
<i>Chairman long</i>	Dummy variable equals 1 if the chairman has foreign experience longer than one year, otherwise 0
<i>Chairman short</i>	Dummy variable equals 1 if the chairman has foreign experience shorter than one year, otherwise 0
<i>CEO long</i>	Dummy variable equals 1 if the CEO has foreign experience longer than one year, otherwise 0
<i>CEO short</i>	Dummy variable equals 1 if the CEO has foreign experience shorter than one year, otherwise 0
<i>christian policy</i>	The number of christian colleges built by missionaries until 1920 for each province Dummy variable equals 1 for years in which the allowance policy is implemented for each province, otherwise 0
<i>post</i>	Dummy variable equals 1 if firm-year observations are after the CEO turnover, otherwise 0
<i>transition</i>	Dummy variable equals 1 if a firm's CEO transition in year t is from a CEO without foreign experienced to one with foreign experience, and 0 if the CEO of firm i 's transition year t does not any foreign experience
<i>High_edu</i>	The proportion of employees who hold a bachelor's degree or above
<i>High_expert</i>	The proportion of employees whose jobs are located at Zone 4 or 5 using JobZone data from Occupational Information Network
<i>High employee protection</i>	Dummy variable equals 1 if the manager gained experience from countries with top5 labor protection index, otherwise 0
<i>High investor protection</i>	Dummy variable equals 1 if the manager gained experience from countries with top5 investor protection index, otherwise 0
<i>quick_ratio_{t-1}</i>	The sum of cash, short-term investment and receivables over current liabilities
<i>leverage_{t-1}</i>	Total liability over total assets

(continued)

Table A1. Continued

Variables	Definition
<i>firm_size</i> _{<i>t-1</i>}	The natural logarithm of total assets
<i>roa</i> _{<i>t-1</i>}	The net income over total assets
<i>top1</i> _{<i>t-1</i>}	The largest shareholding over the number of shares outstanding
<i>labor_intensity</i> _{<i>t-1</i>}	The number of employees (times 10 ⁷) over total assets at the end of <i>t</i> - 1
<i>indep</i> _{<i>t-1</i>}	The number of independent directors over the total number of directors on the board
<i>bsize</i> _{<i>t-1</i>}	The natural logarithm of total number of directors on the board
<i>insti</i> _{<i>t-1</i>}	The percentage of institutional ownership
<i>tangible</i> _{<i>t-1</i>}	The ratio of net fixed assets over total assets
<i>Std_cfo</i> _{<i>t-1</i>}	Standard deviation of the cash flow from operations in the previous five years (year <i>t</i> - 5 to <i>t</i> - 1)
<i>Std_nethire</i> _{<i>t-1</i>}	Standard deviation of the change in the number of employees in the previous five years (year <i>t</i> - 5 to <i>t</i> - 1)
<i>otherinvestment</i>	The absolute value of the residuals from the regression model of non-labor investments [i.e. (cash payments for fixed assets, intangible assets, and other long-term assets minus the cash receipts from selling these assets)/total assets] versus sales growth
<i>div</i> _{<i>t-1</i>}	Dummy variable equals 1 if a firm pays dividend, otherwise 0
<i>big4</i> _{<i>t-1</i>}	Dummy variable equals 1 if a firm hires the audit service of a top 4 auditor in China, otherwise 0
<i>soe</i> _{<i>t-1</i>}	Dummy variable equals 1 if the ultimate controller of the firm is the state or state-owned enterprises, otherwise 0
<i>duality</i> _{<i>t-1</i>}	Dummy variable equals 1 if a firm's chairman and CEO are the same person, otherwise 0
<i>Sales_growth</i>	Percentage change in sales from financial year <i>t</i> - 1 to financial year <i>t</i>
<i>AUR</i>	The ratio of sales over total assets
<i>loss_dums</i>	Indicator variables coded as 1 if a firm had negative ROA for financial year <i>t</i> - 1
<i>Chairman age</i>	The nature logarithm of chairman's age each year
<i>Chairman gender</i>	Dummy variable equals 1 if a chairman's gender is male, otherwise 0
<i>CEO age</i>	The nature logarithm of CEO's age each year
<i>CEO gender</i>	Dummy variable equals 1 if a CEO's gender is male, otherwise 0
<i>GDP_Growth</i> _{<i>t-1</i>}	The growth of provincial GDP each year
<i>inflation</i> _{<i>t-1</i>}	The inflation rate in China each year
<i>Money_supply growth</i> _{<i>t-1</i>}	The growth of money supply from the central bank each year

Note(s): This appendix shows the variable definitions used in this paper

Source: Authors' own work

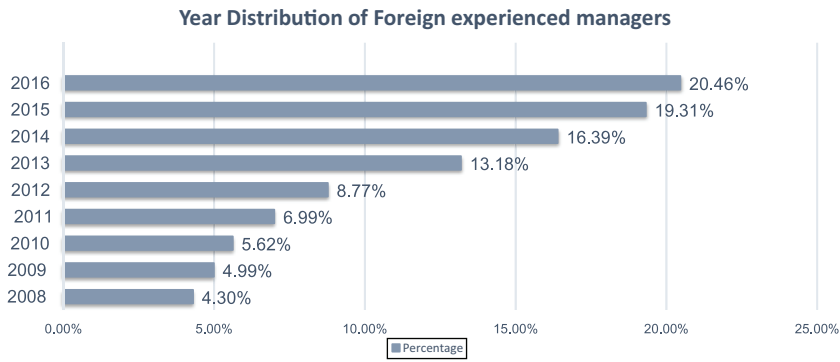


Figure A1. Year distribution

Note(s): This appendix shows the year distribution of foreign experienced managers

Source: Authors' own work

Table A2. PSM validity test

Variable	Control group	Treatment group	
	Mean	Mean	Difference
<i>quick_ratio</i> _{<i>t</i>-1}	1.435	1.418	0.016
<i>leverage</i> _{<i>t</i>-1}	0.435	0.436	-0.001
<i>firm_size</i> _{<i>t</i>-1}	22.05	22.038	0.012
<i>roa</i> _{<i>t</i>-1}	0.043	0.041	0.002
<i>top1</i> _{<i>t</i>-1}	0.349	0.350	-0.002
<i>labor_intensity</i> _{<i>t</i>-1}	10.843	10.435	0.408
<i>indep</i> _{<i>t</i>-1}	0.372	0.371	0.002
<i>bsize</i> _{<i>t</i>-1}	2.159	2.163	-0.004
<i>insti</i> _{<i>t</i>-1}	0.078	0.074	0.004
<i>tangible</i> _{<i>t</i>-1}	0.237	0.244	-0.007
<i>Std_cfo</i> _{<i>t</i>-1}	0.044	0.043	0.001
<i>Std_nethire</i> _{<i>t</i>-1}	0.529	0.512	0.017
<i>otherinvestment</i> _{<i>t</i>}	0.037	0.037	0.000
<i>div</i> _{<i>t</i>-1}	0.715	0.705	0.010
<i>big4</i> _{<i>t</i>-1}	0.119	0.113	0.006
<i>soe</i> _{<i>t</i>-1}	0.339	0.327	0.013
<i>duality</i> _{<i>t</i>-1}	0.229	0.226	0.002
Observations	1,745	1,745	

Note(s): This table presents the effectiveness of the propensity score matches between the control and treatment groups. All variables are defined in [Appendix 1](#). The differences in mean sample *t*-statistics are all insignificant

Source(s): Authors' own work

Corresponding author

Hamish D. Anderson can be contacted at: h.d.anderson@massey.ac.nz